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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Martin Philip Riddiford

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01/31/2003

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EXAMINER

LEA EDMONDS, LISA S

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 01/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,751

Applicant(s)

RIDDIFORD, MARTIN PHILIP

Examiner

Lisa Lea-Edmonds

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the extendible rearward feet must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 42 is objected to because of the following informalities: the word "fron" is believed to be a misspelling for "front". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner of record what applicant regards as the "extendible feet" as claimed. In figure 5, element 31, applicant's shows "feet", however element 31 are not extendible from the base of the computer as claimed.

4. Claim 18 recites the limitation "the base" in line 4 of page 4. There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 10, 16-22, 25-28, 30-32, and 35-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamura et al.. With respect to claims 1-7, 10, 16, 17, and 42, the apparatus of Tamura et al. teaches: A microprocessor controlled device having an upper leaf (2) and a lower leaf (1) said upper leaf (2) has a display screen (5) configured to accept user input through the application of a force applied to the surface of the screen (5) said upper leaf (2) mounted on said lower leaf (1) with the screen (5) oriented at a comfortable viewing angle for a user when the lower leaf (1) is in a generally horizontal orientation, said lower leaf (1) having a front and rear edge, said upper leaf (2) positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen (5) in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle; wherein the force is less than that needed to cause tipping because the length of the moment arm, defined by the length of the distance from the point of application of the turning force to the rotational axis, is less than the length of the moment arm would be if the display (5) were hinged to the lower leaf (1) at a fixed point at the rear of the lower leaf (1) in a conventional clam shell arrangement; wherein the

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force is less than that needed to cause tipping because the length of the moment arm is reduced by using a hinge (10, 11) that will cause the display (5), when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it would be in if the upper leaf (2) were hinged to the lower leaf (1) at a fixed point at the rear of the lower leaf (1); wherein the force is less than that needed to cause tipping for the further reason that the center of gravity of the device has been displaced forward, thereby increasing the magnitude of the torque resisting backwards tipping; wherein the length of the moment arm is reduced by using a hinge (10, 11) that will cause the display (5), when fully opened, to be displaced downwards from, but substantially parallel to, an ordinary, open position it could be in if the upper leaf (2) were hinged to the lower leaf (1) at a fixed point at the rear of the lower leaf; wherein the length of the moment arm is reduced by extending the rear of the lower leaf (1); wherein the extension is achieved using rearward feet (see figures bottom of lower leaf (1) in 8a-9c, 21a-21e, and 26-29) which are permanent; further comprising a keyboard (4) coupled to the lower leaf (1), in which a casing for the display (5) has similar dimensions in plan to the keyboard (4) so that in the closed position the casing for the display (5) substantially covers the keyboard (4); further comprising a lower leaf base and an upper leaf casing for the display (5) in which the rear of the fully opened casing rests directly upon a part of the base (see figure 3, 9c, 18, 21c, 27, 36b, 43 and 45). With respect to claims 18-20, the apparatus of Tamura et al. teaches: A microprocessor controlled device comprising; an upper leaf (2) and a lower leaf (1), said upper leaf (2) having a display screen (5) configured to accept user input through the application of a force applied to the surface of the screen; said upper leaf (2) mounted on said lower leaf (1) with the screen (5) oriented at a comfortable viewing angle for a user when the lower leaf (1) is in a generally horizontal orientation; said lower leaf (1) having a front and rear edge; said upper leaf (2)

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positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen (5) in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would cause such tipping if the same upper leaf (2) were mounted at the rear edge of the same lower leaf (1) with the screen (5) at the same comfortable viewing angle; and, a hinge (10, 11) coupling said upper leaf (2) and said lower leaf (1) that allows the base of the display (5) to move forwards during either opening or closing of the device; further comprising a lower leaf base and an upper leaf casing for the display (5) in which the rear of the fully opened casing rests directly upon a part of the base. With respect to claims 21, 22 and 43, the apparatus of Tamura et al. teaches: A microprocessor controlled device comprising; a base (1) having a front edge and a back edge; a pressure sensitive screen (5) having a top and a bottom, said screen (5) mounted to said base (1); said screen (5), when in a viewing position, at an angle which is tilted with respect to the base (1); and wherein at least a portion of the screen (5), when in a viewing position, is positioned inward from a rotational axis of the base, such that a first equivalent torque of the portion of the screen (5) positioned inward from a rotational axis of the base combined with a second equivalent torque of the base is at least 30 percent greater than a third equivalent torque of the portion of the screen (5) positioned outward of the back edge of the base combined with a fourth equivalent torque from a typical force applied perpendicular to the screen (5) at a top most touch sensitive portion of the screen (5), thereby preventing the screen (5) and base from tipping over when the base (1) is on a flat surface and the base (1) is not permitted to slide rearwardly, and wherein any force of more than 220 percent of the typical force applied perpendicular to the screen (5) at a top most touch sensitive portion of the screen (5) causes the screen (5) and base (1) to tip; wherein the typical force is

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approximately 80 g-forces; wherein the front of the display screen faces the base when the device is closed. With respect to claims 25-28, the apparatus of Tamura et al. teaches: A microprocessor controlled device comprising: a base (1) having a front edge and a back edge, said base (1) having a first weight; a force sensitive screen (5) having a top and a bottom, said screen (5) mounted when in a viewing position to said base (1) at an angle which is tilted with respect to the base (1), the screen (5) having a second weight being no less than 33 percent of the first weight; and wherein the bottom of the screen (5) is positioned between the front edge and the back edge of the base (1), and said screen (5) further positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most touch sensitive portion of the screen (5) the base (1) and the screen (5) do not tip over when the base (1) is on a flat surface and the base (1) is not permitted to slide rearwardly; wherein the typical force is approximately 80 g-forces; wherein the first weight is approximately 245 grams. With respect to claims 30-32; the apparatus of Tamura et al. teaches: A microprocessor controlled device comprising; a base (1); a force sensitive screen (5) having a length and width defining a screen area, said screen (5) mounted when in a viewing position to said base at an angle which is tilted with respect to the base (1); said screen (5) mounted to the base (1) so that at least 30 percent but not more than 80 percent of the screen area is positioned directly above the base (1); and said screen (5) positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen (5) at a top most pressure sensitive portion of the screen (5), the screen (5) and base (1) do not tip over when the base (1) is on a flat surface and the base is not permitted to slide rearwardly; wherein the typical force is approximately 80 g-forces; wherein the device pivots about feet (see figures bottom of lower leaf (1) in 8a-9c, 21a-21e, and 26-29) mounted to the base (1). With respect to claims 35-37, the apparatus of Tamura et al.

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teaches: A microprocessor controlled device comprising; a base (1) having a length and a width, said base (1) adapted to rest on a horizontal flat surface; a force sensitive screen (5) mounted to said base (1) at an angle which is tilted with respect to said base (1) to permit easy viewing of the screen (5); and said screen (5) being positioned with respect to the base (1) such that a line perpendicular to the screen (5) and passing through the top most force sensitive portion of the screen (5) also passes through the base (1); wherein the angle is in a range of 21 degrees to 31 degrees; wherein the angle is 26 degrees. With respect to method claim 38, the apparatus of Tamura et al. teaches: A method of positioning a force sensitive display (5) with respect to a microprocessor controlled device to prevent tipping, the method comprising the acts of providing a base (1) having a front edge and a back edge; providing a display (5) having a top and bottom, said display (5) coupled to said base (1); orienting the display (5) at an angle to the base (1) to provide for viewing, wherein the bottom of the display (5) is positioned between the front edge and the back edge of the base (1) such that a torque typically applied to the top most force sensitive part of the display (5) is less than that needed to cause the computer to tip about a rotational axis, but said torque would be sufficient to cause tipping if the display (5) were hinged to the base (1) in a conventional clam shell arrangement at the back edge of the base (1). With respect to the method claims 39-41 and 44, the apparatus of Tamura et al. teaches: A method of designing a microprocessor controlled device with a touch sensitive or pen sensitive display (5), comprising the steps of providing a base (1) having at least one edge; providing a display (5) having a top and bottom, said display (5) coupled to said base (1); arranging the position of the fully opened display (5) such that the maximum torque typically applied to the top most force sensitive part of the display (5), in relation to a rotational axis about which the device would rotate if it were to tip backwards, is less than that needed to cause the computer

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to tip backwards about that rotational axis, but, if the display (5) were hinged to the base in a conventional clam shell arrangement at the rear of the device, said torque would be sufficient either to cause such tipping or to cause the display (5) to be rotated away from a normal viewing position; wherein the step of arranging is achieved by using a hinge (10, 11) that will cause the display (5), when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it could be in if the display (5) were hinged to the base (1) at a fixed point at the rear of the device wherein the front of the display screen (5) faces towards the base (1) when the device is closed, further including orienting the display towards the base when the device is closed. With respect to claim 45, the device of Tamura et al. teaches a microprocessor controlled device comprising: a base (1), having a front edge and a back edge; a pressure sensitive screen (5), the pressure sensitive screen (5) having a top edge and bottom edge, the pressure sensitive screen (5) coupled to the base (1); and, screen (5) adjustment means, said screen (5) adjustment means increasing the distance between the position of the bottom edge of the screen (5) relative to the back edge of the base (1) in order to stabilize the device upon exercise of pressure upon the pressure sensitive screen (5). With respect to claim 46, Tamura et al. a computer comprising: a base (1) having a front edge and a back edge; a pressure sensitive screen (5), the pressure sensitive screen (5) having a top edge and a bottom edge; and, a hinge (10, 11) coupling the screen (5) to the base (1), said hinge (10, 11), when opened, displacing the screen (5) forward from but substantially parallel to the rear edge of the base (1), in order to stabilize the computer upon exercise of pressure upon the pressure sensitive screen (5). With respect to the claims in which the claim language states a desired result and/or function of the force and/or torque applied to the screen, such limitations would be inherent to the design of the apparatus of Tamura et al..

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-15, 23, 24, 29, 33, and 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura et al.. With respect to claims 13-15, 23, 24, 29, 33, and 34, the apparatus of Tamura et al. teaches the claimed invention as stated above, however, Tamura et al. lacks a teaching of the types of computer and/or microprocessor controlled device being a palmtop, sub-notebook and/or notebook computer as claimed. With respect to the types of computer and/or microprocessor controlled device (palmtop, sub-notebook, or a notebook) it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Tamura et al. into any of the well known types of computers as palmtop, sub-notebook, or a notebook are included in the types of computers as stated in column 1 lines 5-10 of Tamura et al.

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al, in view of Tamura et al.. With respect to claims 11 and 12, the apparatus of Hsu et al. teaches A microprocessor controlled device having an upper leaf (12) and a lower leaf (10) said upper leaf (12) has a display screen (22) said upper leaf (12) mounted on said lower leaf (10) with the screen (22) oriented at a comfortable viewing angle for a user when the lower leaf (10) is in a generally horizontal orientation, said lower leaf (10) having a front and rear edge; a keyboard (6) coupled to the lower leaf (10) which extends forward as the display (22) is raised and which tilts slightly towards the user during its extension; and wherein the force typically applied to the part of the

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keyboard (6) closest to the user is less than that needed to cause the computer (2) to tip forward, in relation to a rotational axis about which the device would rotate if it were to tip forwards as claimed. However, Hsu et al. lacks a teaching of the display being configured to accept user input through the application of a force applied to the surface of the screen (22). The apparatus of Tamura et al. is relied upon for its teaching of a display being configured to accept user input through the application of a force applied to the surface of the screen (5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Tamura et al. into the apparatus of Hsu et al. to provide the user with an alternative means of data input.

Response to Arguments

9. Applicant's arguments with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note the computer systems of Motoyama et al., Takano and Duwaer.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 703-305-0265. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1782.

Lisa Lea-Edmonds
Examiner
Art Unit 2835

LL-E

January 27, 2003


DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800